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ABSTRACT

This study investigated 140 New York State public elementary and secondary schools to determine the extent to which teacher perceptions of effective schools correlates as determined by the New York State Education Department are associated with student achievement, when student background variables are used as controls. The State Education Department hypothesizes that if teachers could become more accurate perceivers of their schools' reality, then that accurate perception would, by itself, compel action to improve student achievement. The study considers only the truth value of the hypothesis. Results found no relationship between the correlates as measured by the New York State Survey and student achievement above predictions based on student background. Also, teacher perceptions considered as an aggregate assessment of environmental conditions do not reflect how an individual in a school perceives, understands, or responds to his or her school organization's reality. Teachers see the school as a workplace for themselves; they care about their practice and believe in its efficacy. Teachers in schools serving any and all kinds of students can maintain beliefs about themselves that are independent of student performance. Using the New York State Survey of Teacher Perceptions of School Programs as a fulcrum for school improvement is an unproductive policy direction. (MLH)

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USING TEACHER PERCEPTIONS AS A FULCRUM FOR SCHOOL IMPROVEMENT: THE NEW YORK STATE EFFECTIVE SCHOOLS PROCESS

by

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Presented at the 1992 International Congress for School Effectiveness and Improvement, Victoria, British Columbia, Canada

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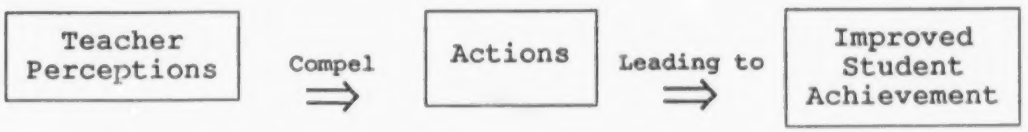
ABSTRACT

USING TEACHER PERCEPTIONS AS A FULCRUM FOR SCHOOL IMPROVEMENT: THE NEW YORK STATE EFFECTIVE SCHOOLS PROCESS

Joseph Paul Sabatella

This study investigates 140 New York State public elementary and secondary schools to determine the extent to which teacher perceptions of the existence of the effective schools correlates as identified by the New York State Education Department are associated with student achievement when student background variables are used as controls.

The State Education Department is hypothesizing that, if teachers could become more accurate perceivers of the reality of their schools (without respect to subjective perceptions unconnected to student achievement), then that accurate perception would, by itself, compel action that would improve student achievement.



This study considers only the truth value of the hypothesis (first and last box) and not the processes occurring between or among the boxes.

The conclusions reached in this study are:

1. that no relationship was found between the correlates as measured by the New York State Survey, and student achievement above predictions based on student background.
2. that teacher perceptions considered as an aggregate assessment of environmental conditions do not reflect how an individual in a school perceives, understands, or responds to the reality of their school organization.
3. that teachers see the school as a workplace for themselves; they care about their own practice and need to believe in its efficacy. Both phenomena override any attention to the performance of nominal clients of the institution, and, thus, teachers in schools serving any and all sorts of students can maintain beliefs about themselves and the institutions that are independent of student performance.
4. that the New York State Survey of Teacher Perceptions of School Programs does not address

the phenomenon that is at work in the school organization. Findings in this study suggest that all eleven correlates are measuring a constant defined as school ethos or climate. Therefore, using the results of this survey as a fulcrum for school improvement is an unproductive policy direction.

INTRODUCTION

Effective schools research has indicated that schools do indeed matter, that teachers make a difference, and that all kids can learn (Lezotte, 1985). The improvement of schools, as measured by student academic achievement, has been and continues to be a major concern in this country.

> The Aspirations of the Effective Schools movement are centered on schools that can literally compensate for what less advantaged children do not bring to school. Effective Schools try to equalize educational opportunities and, to that extent, to contribute to the social and economic mobility of the children of the underclass in ways not now characteristic of public schools. (Mann, 1989, p. 1)

In an effort to begin developing more effective schools, the New York State Board of Regents in December 1978, adopted the Resource Allocation Plan. This plan called for school improvement in areas of "administrative, curricular, instructional and evaluative practices" (p. 11). Schools identified by the State Education Department for mandatory participation in this program had

poor student achievement results on one or more statewide examinations. The State was defining student achievement in terms of performance on State developed tests in reading, writing, and mathematics. The student achievement tests were to be reported by individual schools in terms of school-wide percentage of students achieving above State-defined minimum competency levels. Student achievement was to be measured by the following criteria:

- Pupil Evaluation Program Test Grades 3 and 6--Reading and Math
- Pupil Evaluation Program Test Grade 5--Writing
- Preliminary Competency Test Grade 8 or 9--Reading
- Regents Competency Tests Grades 9 and 11--Writing and Math

In schools that received long-term assistance from the Resource Allocation Plan, representative faculty members, administrators, and often students and parents served as the school committee that was to develop and implement a multi-year comprehensive plan to improve student achievement. The development of the comprehensive plan was to be a participatory, data-based process designed to improve working relationships, programs, student learning, and school climate within an organization. The work of this committee was to include

needs assessments, goal setting, human relations development, decision making, problem solving and evaluation procedures (Fitzgerald & Sabatella, 1989).

A report presented to the Board of Regents in 1984 described the program as a success. There was "significant improvement in student achievement results in RAP schools when compared with non-RAP schools" (Fitzgerald, 1984, p. 4).

In 1979-1980, RAP schools had a lower percentage of students achieving above the statewide reference point (SRP) than non-RAP schools in reading and mathematics at both the third and sixth grade levels. By 1982-1983, after three years of involvement with the Resource Allocation Plan, RAP schools had a greater percentage of students scoring above the SRP at both grade levels in reading and mathematics than non-RAP schools. The same results were true for the Preliminary Competency Tests in reading, writing, and mathematics. The State Education Department said, "These data indicated that a comprehensive planning process, when implemented systematically and cooperatively, can raise student achievement dramatically" (Fitzgerald & Sabatella, 1989, p. 3).

The State specified the elements and intentions of its policy, tried to move those to school practice, and

measured the (allegedly) subsequent "effects" quantitatively by State standardized tests. This is a classic example of policy analysis using the old input-output paradigm (Darling-Hammond, 1990, p. 234).

As a result of the success reported under the Resource Allocation Plan, and in reaction to the recently released "A Nation at Risk" report and other reports critical of the state of education in the United States, the Board of Regents, in March 1984, approved the Action Plan to Improve Elementary and Secondary Education Results in New York (known in New York State as the Regents Action Plan). Two provisions of the action plan are critical to a discussion of school improvement activities within the state: The Comprehensive Assessment Report and the Comprehensive School Improvement Plan (CSIP).

In October of each year, the State Education Department submits to each school district and to each non-public school a Comprehensive Assessment Report (CAR). This report includes three years of student test data on all pupil evaluation program tests, Regent preliminary competency tests, program evaluation tests, Regent examinations, occupational education proficiency examinations, and second language proficiency examinations.

Data are also provided on student enrollment; student dropout and attendance rates; high school graduation results; racial-ethnic distribution and limited English proficiency status of pupils; average class size; pupil-support staff ratios; socioeconomic indicators; and pupil mobility indicators.

Districts are asked to verify the data contained in the Comprehensive Assessment Report and to present the report to their boards of education in public meetings. In addition, the chief administrative officer of the school "shall initiate measures designed to improve results related to their respective comprehensive assessment report" (Regents Action Plan, 1984, p. 11).

The purpose of this local report is to provide an opportunity to each Board of Education to review annually and comment on student achievement and thereby serve as a public record of accountability for education results in the school or district.

The Comprehensive Assessment Report is also used by the State to identify the bottom ten percent of public schools in the State in terms of student achievement on statewide examinations. The identification process is the same as for previously identified RAP schools. Any school that is identified as being in need of assistance is required to develop a Comprehensive School Improvement

Plan (CSIP). This plan must be developed in consultation with teachers, administrators, other school service professionals, students, and parents. Representatives from the State Education Department are selected to assist the schools in the preparation of their CSIP. Each completed Comprehensive School Improvement Plan must be approved by the Board of Education with copies sent to the State Education Department.

As a result of the Regents policy, 504 of the 3,958 New York State public schools with low student achievement on one or more of the state-wide exams were required to submit Comprehensive School Improvement Plans (CSIP) to the State Education Department by April 30, 1985.

To assist the 504 identified low achieving schools and any other school interested in the Effective Schools planning process and research, the State Education Department created the New York State Effective Schools Consortium. Using the effective schools literature, this consortium identified eleven effective schools correlates that were to be used in assisting schools with their action plans for school improvement. This consortium also created the "Survey of Professional Staff Perceptions of School Programs," which was to help schools identify the effective schools correlates they needed to improve upon to increase student achievement.

The eleven effective school correlates identified by the consortium and used in the New York State "Survey of Professional Staff Perceptions of School Programs" are as follows:

1. Positive School Climate
2. Planning Process
3. Academic Goals/High Expectations
4. Clearly Defined Curricula
5. Monitoring Student Progress
6. Teacher/Staff Effectiveness
7. Administrative Leadership
8. Parent and Community Involvement
9. Opportunity for Student Responsibility and Involvement
10. Rewards and Incentives
11. Order and Discipline (Guide to the Comprehensive Assessment Report, 1986).

The concept behind the State's approach is that a set of school practices shown to promote student achievement in one school can do the same if implemented in any school environment.

The purpose of this policy was to improve student achievement by improving a school's attention to the concepts identified through the effective schools research. The State did not specify action to be taken by

individual schools; however, some believe that particular interventions are implied in the criteria and measurement devices created by the State.

Within the past twenty years, the effective schools concept has grown from a description of the characteristics of effective inner-city elementary schools in Detroit into what is being both promoted and resisted as a blueprint for improving all schools.

The New York State Education Department and its Effective Schools Consortium continue to rely heavily on the "Survey of Professional Staff Perceptions of School Programs" to be the instrument that informs over 1,000 participating New York State public schools about their organization in terms of the effective schools correlates. The reliance on this instrument suggests that teacher perceptions are being used as a fulcrum for school improvement.

It is reasonable to infer that the State Education Department believes that if teachers could become more accurate perceives of the reality of their schools (without respect to subjective perceptions, unconnected to student achievement) then that accurate perception would, by itself, compel action that would improve educational achievement. Table 1.1 suggests that teacher perceptions of all of the New York State defined effective schools

Table 1.1

Pearson Correlation: Student Achievement with Teacher Perception of Existence of Effective Schools Correlates*

NYSED Characteristics (11)	Elem. & Sec. (N=179)	Elementary (N=129)	Secondary (N=50)
Order/Achievement	.3534 (.001)	.3190 (.001)	.4182 (.01)
Climate/Achievement	.3231 (.001)	.3007 (.001)	.3584 (.01)
Parent Involvement/Ach.	.3199 (.001)	.3615 (.001)	.2467 (.05)
Monitor Student Progress/Ach.	.2836 (.001)	.2469 (.01)	.3432 (.01)
Student Responsibility/Ach.	.2532 (.001)	.3803 (.001)	.0754
Teacher Effectiveness/Ach.	.2447 (.001)	.1753 (.05)	.3568 (.01)
Curriculum/Achievement	.2005 (.01)	.1876 (.05)	.1604
Academic Goals/Achievement	.1802 (.01)	.1219	.2196
Administrative Leadership/ Achievement	.1648 (.05)	.1136	.2101
Planning/Achievement	.1529 (.05)	.1185	.1498
Rewards/Achievement	.1377 (.05)	.1322	.1283
Multiple R	.5468 (.001)	.6161 (.001)	.6823 (.05)

*This study was conducted by the State Education Department to assess the reliability and validity of the "New York State Teacher Perception Study."

Source: Kelly & Rooney, New York State Education Department Effective Schools Consortium Survey: Reliability and Validity, undated.

correlates are positively and significantly related to student achievement when elementary and secondary schools are considered together in the data analysis. When considered separately, teacher perceptions of seven of the correlates remain significantly correlated to student achievement at the elementary level (student responsibility .38, parent and community involvement .36, order and discipline .32, positive climate .30, monitoring student progress .24, clearly defined curriculum .19, teacher effectiveness .18), and five remain significantly correlated at the secondary level (order and discipline .42, positive climate .36, teacher effectiveness .36, monitoring student progress .34, parent and community involvement .25).

Much of the consortium's research that suggests positive and significant relationships between teacher perceptions of the effective schools correlates and student achievement continues to influence New York State "Effective Schools" policy and program implementation throughout the state.

Coughlan and Cooke (1974) supports the reliance on teacher perception surveys saying,

> Experience in industry and elsewhere has shown that work attitude surveys can be important additions to administrative procedures for assessing and improving the performance of school personnel. They can be used to assess the underlying patterns of attitudes of faculty

> members in terms of categories of items. Overall, findings thus provide a broad diagnosis of the impact of district programs, policies and procedures. (p. 311)

Miles et al., (1969) note that survey feedback tends to disconfirm or corroborate individual feelings, general interests and concerns, and stimulates analysis and problem solving.

It is also suggested that if anonymity is preserved, the quality and reliability of the survey results suffer a minimal of contamination as a result of staff concealment (Burns, 1952). Other researchers have suggested that teacher perceptions are less than accurate measures on which to base school improvement efforts (Mann & Lawrence, 1983; Mortimore et al., 1988; Stringfield & Teddlie, 1988).

Survey instruments which are essentially a kind of self-report from the teacher are not without their drawbacks. Such instruments are limited by the nature of the reports: their ability to observe and comment objectively and by their willingness to do so (Popham, 1975). Popham is not suggesting that teacher willfully engage in deception; rather, that people wish to think well of themselves and what they do for a living. This attitude could easily influence the ability of a teacher to report fully and objectively.

Looking hard at what we do, the questions to ask are of the kind: are teacher judgments based on relevant evidence or on general impressions influenced to some degree by personal prejudice or by non-relevant aspects (Harlen, 1978). We are keenly aware that such is the case in relation to judgment about people, or there would be no need for legislation about discrimination. It is suggested here that such may also be the case in teacher judgments about school and their work. Peter Mortimore et al. (1988) address the issue of reliance on teacher perception in their book School Matters:

> Social psychology has shown that people are not always fully aware of their own behavior. An interesting example of this occurred when the majority of teachers reported in interviews that they spent most of their time dealing with the class as a whole, rather than individuals or groups. From systematic observations, however, it was clear that, in every year, teachers spent more time communicating with individuals than with the class as a whole or with groups. The results suggest that teachers' perceptions may not always correspond with what is actually happening. This points to the necessity of obtaining information from a variety of sources. (p. 6)

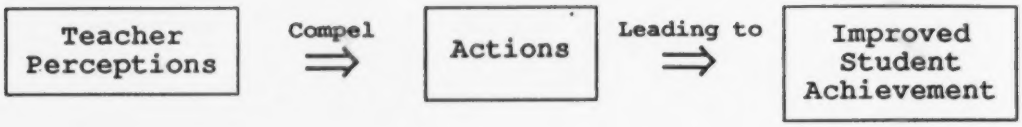
Current educational research on "school effects" conducted by Stringfield and Teddlie (1988) and Peter Mortimore et al. (1988) demonstrates the need to factor in student input variables (race, socioeconomic status, sex, and ethnicity) when determining the effect school has on student achievement outcomes and the possibility of

overriding the deficits ordinarily attached to those variables if the improvement interventions are aggressive enough.

The question for this study is, whether teacher perceptions of their own school, their program, and their work are related to the presence or absence of student achievement above prediction levels based on student background. Predictions based on the research cited above are that teacher perceptions will not be related to student achievement.

This study will investigate 140 New York State public elementary and secondary schools to determine the extent to which teacher perceptions of the existence of the effective schools correlates as identified by the New York State Education Department are associated with student achievement when student background variables are used as controls.

The New York State Education Department is hypothesizing that, if teachers could become more accurate perceivers of the reality of their schools (without respect to subjective perceptions unconnected to student achievement), then that accurate perception would by itself compel action that would improve student achievement.



This study will consider only the truth value of the hypothesis (first and last box) and not the processes occurring between or among the boxes.

CONCLUSIONS AND RECOMMENDATIONS

The question for this study was whether teachers' perceptions of their own school, their program, and their work related to the presence or absence of student achievement above predictive levels based on student background. The question was prompted by a State policy on effective schooling that relies on teacher perceptions as a fulcrum for school improvement.

The success of the state policy hinges on two key points: first, that teachers are willing to accurately access the realities of their school without respect to subject perceptions, unconnected to student achievement; second, that once conditions in a school are accurately assessed, that would, by itself, compel action that would improve student achievement.

To ensure that teachers would be considering realities that the State identified as key to improving schools, the State defined in the New York State Survey of Professional Staff Perceptions of School Programs, eleven

correlates of effective schools and defined questions to be considered under each of those correlates. The State is suggesting that if the schools were to use this instrument and understand where, in teacher perceptions, weaknesses existed in the school, teachers and administrators would rush to make the situation better and this would positively impact on student achievement.

As implied by the research question, the approach to achieving the purpose of the study was to focus on teacher perceptions of the existence of the effective schools correlates as they relate to student achievement when student background variables are used as controls. The intent of the study is to inform policy makers on the wisdom of using teacher perceptions as a fulcrum for school improvement in the state.

Conclusions Concerning Teacher Perceptions and Student Achievement

Once pupil intakes are accounted for, the accuracy of teacher perceptions (aggregate quantity) of various school conditions as measured by the New York State Survey of Professional Staff Perception of School Programs is not associated with school improvement.

The data suggest that teachers see the school as a workplace for themselves; they care about their own

practice and need to believe in its efficacy. Both phenomena override any attention to the performance of nominal clients of the institution, and, thus, teachers in schools serving any and all sorts of students can still maintain beliefs about themselves and the institution that are cheerfully and blissfully independent of student performance. In that world, it would be irrelevant to try to use teacher perceptions as a method to improve schools because the two, based on evidence presented in this study, have nothing to do with each other. Two practical consequences suggested by these findings are (a) schools don't need to work to improve the underlying teacher workplace because teacher judgments about it don't matter, or (b) that all the ideal/actual measurements are looking at the wrong phenomenon.

The question needing attention at this point is what led the State to the somewhat naive belief that teacher perceptions could be used as a fulcrum for school improvement in the first place.

One could argue that the State simply adopted a rational model approach to school improvement. This linear model approach was based on several presumptive assumptions: first, that the best way to identify what realities exist in a school was to ask the teachers who work on a day-to-day basis in the school. This could be

accomplished via the use of the New York State Survey of Professional Staff Perceptions of School Programs. Second, if teacher perceptions were directed towards the correlates of effective schools as identified by the state, teachers would be able to accurately identify which correlates existed most and which existed least. Finally, once armed with this knowledge, the schools would be compelled to raise the existence levels of the correlates and thereby improve student achievement. If this was the State's rationale, data in this study show that the State made the incorrect assumptions about teacher perceptions and about teacher perceptions leading to action. However, what this arguement fails to consider is that the issue of school improvement was saturated from the beginning in the politics and political power of NYSUT. The needs of children were crossed with the needs of the political organization representing the teachers.

Teacher organizations have become more powerful and have gained the ability to alter the system's goals to coincide with their own. NYSUT was clamoring for more teacher empowerment and a greater role in the organization and operation of schools. They suggested that if schools were to improve, teachers needed to be the people defining the change effort.

At that point, the State Education Department found it less intrusive and politically more expedient to focus on the possibility of changing teacher beliefs than actually changing teacher practice (soft stratagies vs. hard strategies). Critical issues surrounding teaching practice and their effects on school improvement remained as topics below the water line that, if pursued, might sink the State school improvement ship. When the State's power to persuade ends, they walk away, and for schools and teachers, it's business as usual. Volunteer systems of improvement focus on whatever their participants think needs improving. The question is, should public policy be solely determined by that which is acceptable to some or even all of the professionals in a school? That is, adding up all things teachers are willing to do and anointing that as "policy" (Mann, 1986).

It may not be a question of working harder, but working smarter. The typology used by the New York State Education Department is, for all practical purposes, the same one used by many systems that have tried to bring Instructionally Effective Schools into practice. The encouraging congruence between scientific and practical paradigm is further strengthened by the large number of major studies which, independently, have found the same

set of variables useful in studying Instructionally Effective Schools.

The results of this study should, therefore, not be taken as a signal to give up the effort of creating Instructionally Effective Schools, rather as an opportunity to refocus State policy and practice in a more productive vein. The State made the wrong assumptions about teacher perceptions leading to correct actions. The New York State Survey used to gather teacher perceptions does not address the phenomenon that is at work in the school organizations. Data in this study show that both policy and practice proved to be unproductive.

Redefining Effective Schools

Based on the preceding discussion and findings in this study, the following initiatives are suggested to advance effective schools in New York State.
In education, both children and society should profit when schools add value above and beyond what individual families contribute on their own (Mann, 1989, in publication).

It is being suggested that New York State needs to redefine effective schools in more of a production function model. There are three components to an educational production function model (Richards, 1991)

that need to be considered in drawing conclusions about which schools are effective and which are not. The first requirement is that all the significant inputs to student learning be identified and measured as accurately as possible. This includes out-of-school and in-school contributions: for example, variations in organizational structure, leadership, and the technology of instructional production be specified as thoroughly as possible. This includes such measures as opportunity to learn, time on task, pedagogy, textbooks, and homework.

Second, all relevant background variables such as race, sex, and socio-economic status should be included. Finally, the achievement gains and other learning goals to be measured require pre- and post-testing at the beginning and end of each academic year so that the value added can be determined.

Effective (productive) schools are defined as those that attain higher than average output with the same imputs. If a school has higher quality inputs, it is inappropriate to conclude that it is more effective.

New Directions for State Policy

In terms of policy initiatives, New York State should consider changing the method of reporting student achievement from a percentage of students above a minimal

reference point to actual raw test score data. This would allow for comparison of actual student achievement . The State should consider requiring the disaggregation of test and other data to allow for comparisons of student achievement based on student input factors. Initial student intake characteristics would need to be indentified to determine the value added by education beyond predictions based on student background. Finally, the State will need to recognize the necessity of identifying multiple outcome indicators of school effectiveness beyond test scores (value added outcomes). The policy on effective schools that relied on changing beliefs needs now to focus on the more difficult task of changing behavior and requiring action to be taken to make education effective for all children.

Changing Strategies for More Effective Schooling

State policy and practice were based on the precepts of a user driven system which employs "soft strategies" to change organization and teacher behavior. There are several problems associated with the use of a user driver system that ultimately spelled disaster for this State initiative on effective schooling.

First, the main feature of the user driven system is that it relies on voluntary participation. Research shows

that the least needy organizations and teachers benefit the most from this approach. This means that the worst schools and teachers continue to be the worst.

Second, voluntary efforts happen on an individual basis while schooling outcomes are, for the most part, determined organizationally as a child moves from grade to grade and school to school. Some schools and teachers in a system may choose to participate in effective schools reforms, and some may choose not to participate. Finally, volunteer systems rely on the perceptions of the participants to identify areas needing improvement.

As has been shown in this study it would be irrelevent to try to improve schools based on teacher perceptions because teacher perceptions and school improvement have nothing to do with each other.

"If the lesson of the 1960's was that we could not drive the system from the top down, the lesson of the 1970's should be neither can it be led exclusively from the bottom up" (Mann, 1986, pp. 44-45). If effective schooling is to become a reality for all children, a blending of self-initiative with power and authority must take place. Beyond simple volunteerism, some changes need to be required of all schools, and this may require the exercise of leadership and end with the assertion of

power, that is, the leaders requiring action that the follower may not have otherwise done.

The burden of the policy implications presented here falls squarely on the shoulders of the local educational agency. At the school level, the focus needs to be on changing behavior. The educational enterprise is defined by its aspirations to change its clients. It is ironic that the aspirations no longer extend to those who do the work of educators (Mann, 1986). Expectations for teachers need to be established by the board of education and administration and include growth, development, and change in teaching behavior. The target of the change needs to be those instructional techniques that define the teacher's work with the student, but are not likely to be proposed by teachers as the focus of their development. Findings in this study support this fact and show teachers rating their effectiveness high regardless of student outcomes.

Administrators must set high standards for all teachers with all children and must be willing and able to exercise the authority of their position to require change where necessary. Principals especially must begin to exert a greater degree of instructional leadership because most of the perscriptions for improving the existence of the correlates require their leadership and support.

While conflict and confrontation are not the only means to change, they may be a necessary part of the process. During this process, teachers may be less satisfied while student achievement is improving. This notion is supported in Edmonds' (1979) discussion of effective schools research:

> Generally, teachers in improving schools are less satisfied than teachers in declining schools. This suggests that using teacher perceptions of climate or school ethos as an indicator of student achievement may lead to incorrect conclusions about a school's effectiveness. (p. 20)

Findings in this study suggest that all eleven correlates measure a constant defined as school ethos or climate. Since no relationship was found between the correlates and student achievement above predictions based on student background, perhaps school climate or ethos is the wrong phenomenon to be considered in the school improvement process.

Finally, interventions fashioned to improve education for all children must not simply be voluntary but required of all faculty. The interventions must be substantial, observable, demonstrable, and permanent (Mann, 1986).

The task of changing schools will require more forceful and directed leadership which incorporates both soft and hard strategies for change. It is obvious that the policy direction the State is now pursuing will fail

to meet the ultimate goal of providing more effective schooling for all children in the State.

Ron Edmonds (1979), one of the recognized fathers of the Effective Schools Movement, laid down the gauntlet for educators and school reformers when he said,

> We can, whenever and wherever we choose, successfully teach all children whose schooling is of interest to us. We already know more than we need to successfully teach children. Whether or not we do it must finally depend on how we feel about the fact that we haven't so far. (pp. 18-19)